AMENDMENTS TO THE CLAIMS

Claim 1. (Previously Presented) A method for preserving tuna by bringing smoke into contact with a fresh tuna meat to be preserved, the smoke being generated by burning a smoking material and containing carbon monoxide gas, the method comprising the steps of: inserting a plurality of smoke-injection needles disposed in parallel into the tuna meat, ejecting bubbles of the smoke in small portions, inserting or removing the smoke-injection needles into or from the tuna meat while repeating the inserting and ejecting operations at intervals, thereby dispersively injecting the bubbles of the smoke into the tuna meat; thereby allowing a residual carbon monoxide concentration in the tuna meat to fall within a range from 1100 to 2400 μg/kg; and preserving the resulting tuna meat in frozen storage at about -18°C.

Claim 2. (Previously Presented) The method for preserving tuna according to claim 1, wherein the smoked tuna meat is prevented from browning during freezing at about -18°C for 2.5 to 3.5 months and the smoked tuna meat after thawing exhibits metmyoglobin-formation to an extent near to that of an untreated tuna meat such that the thawed tuna meat exhibits browning within about 12 days.

Claim 3. (Withdrawn) The method for preserving tuna according to claim 1, wherein the residual carbon monoxide concentration in the tuna meat is determined in such a manner that the tuna meat is heated in a predetermined amount of boiling water while blowing a pickup gas into the boiling water, carbon monoxide coordinated with myoglobin in the tuna meat is thereby removed from the myoglobin and is diffused into the pickup gas, the resulting gaseous mixture is contained in a Tedler sampling bag, and a gas concentration in the bag is

measured by using a detector tube or by gas chromatography to thereby determine the residual CO concentration.

Claim 4. (Withdrawn) The method for preserving tuna according to claim 2, wherein the residual carbon monoxide concentration in the tuna meat is determined in such a manner that the tuna meat is heated in a predetermined amount of boiling water while blowing a pickup gas into the boiling water, carbon monoxide coordinated with myoglobin in the tuna meat is thereby removed from the myoglobin and is diffused into the pickup gas, the resulting gaseous mixture is contained in a Tedler sampling bag, and a gas concentration in the bag is measured by using a detector tube or by gas chromatography to thereby determine the residual CO concentration.

Claim 5. (Previously Presented) The method for preserving tuna according to claim 1, wherein said ejecting is at constant intervals.

Claim 6. (Previously Presented) The method for preserving tuna according to claim 1, wherein said ejecting is at a constant pressure and a constant volume.

Claim 7. (Previously Presented) The method for preserving tuna according to claim 1, wherein said smoke further contains one or more organic compounds.

Claim 8. (Previously Presented) The method for preserving tuna according to claim 7, wherein said one or more organic compounds are selected from the group consisting of an organic acid, an aliphatic aldehyde, a cyclic aldehyde, an aromatic aldehyde, an aliphatic

ketone, a monohydric alcohol, a monohydric phenol, a dihydric phenol, a trihydric phenol, an organic base, a hydrocarbon, and mixtures thereof.

Claim 9. (Previously Presented) The method for preserving tuna according to claim 7, wherein said one or more organic compounds are selected from the group consisting of formic acid, acetic acid, formaldehyde, acetaldehyde, furfural, methylfurfural, vanillin, syrinigic aldehyde, acetone, methyl ethyl ketone, methyl alcohol, ethyl alcohol, phenol, cresol, xylenol, anisole, thymol, pyrocatechine, guaiacol, ethylguaiacol, propylguaiacol, eugenol, pyrogallol, pyrogallol monomethylether, pyrogallol dimethyl ether, veratrole, methylamine, ethylamine, 3,4-benzpyrene, and mixtures thereof.

Claim 10. (Previously Presented) The method for preserving tuna according to claim 1, wherein said smoke is pressurized to 2 to 10 kg/cm^2 prior to said ejecting.

Claim 11. (Previously Presented) The method for preserving tuna according to claim 1, wherein said residual carbon monoxide concentration in the tuna meat is within a range from 1500 to 2400 μg/kg.

Claim 12. (New) The method for preserving tuna according to claim 11, wherein the smoked tuna meat is prevented from browning during freezing at about -18°C for 2.5 to 3.5 months and the smoked tuna meat after thawing exhibits metmyoglobin-formation to an extent near to that of an untreated tuna meat such that the thawed tuna meat exhibits browning within about 12 days.

Claim 13. (New) The method for preserving tuna according to claim 11, wherein the residual carbon monoxide concentration in the tuna meat is determined in such a manner that the tuna meat is heated in a predetermined amount of boiling water while blowing a pickup gas into the boiling water, carbon monoxide coordinated with myoglobin in the tuna meat is thereby removed from the myoglobin and is diffused into the pickup gas, the resulting gaseous mixture is contained in a Tedler sampling bag, and a gas concentration in the bag is measured by using a detector tube or by gas chromatography to thereby determine the residual CO concentration.

Claim 14. (New) The method for preserving tuna according to claim 12, wherein the residual carbon monoxide concentration in the tuna meat is determined in such a manner that the tuna meat is heated in a predetermined amount of boiling water while blowing a pickup gas into the boiling water, carbon monoxide coordinated with myoglobin in the tuna meat is thereby removed from the myoglobin and is diffused into the pickup gas, the resulting gaseous mixture is contained in a Tedler sampling bag, and a gas concentration in the bag is measured by using a detector tube or by gas chromatography to thereby determine the residual CO concentration.

Claim 15. (New) The method for preserving tuna according to claim 11, wherein said ejecting is at constant intervals.

Claim 16. (New) The method for preserving tuna according to claim 11, wherein said ejecting is at a constant pressure and a constant volume.

Claim 17. (New) The method for preserving tuna according to claim 11, wherein said smoke further contains one or more organic compounds.

Claim 18. (New) The method for preserving tuna according to claim 17, wherein said one or more organic compounds are selected from the group consisting of an organic acid, an aliphatic aldehyde, a cyclic aldehyde, an aromatic aldehyde, an aliphatic ketone, a monohydric alcohol, a monohydric phenol, a dihydric phenol, a trihydric phenol, an organic base, a hydrocarbon, and mixtures thereof.

Claim 19. (New) The method for preserving tuna according to claim 17, wherein said one or more organic compounds are selected from the group consisting of formic acid, acetic acid, formaldehyde, acetaldehyde, furfural, methylfurfural, vanillin, syrinigic aldehyde, acetone, methyl ethyl ketone, methyl alcohol, ethyl alcohol, phenol, cresol, xylenol, anisole, thymol, pyrocatechine, guaiacol, ethylguaiacol, propylguaiacol, eugenol, pyrogallol, pyrogallol monomethylether, pyrogallol dimethyl ether, veratrole, methylamine, ethylamine, 3,4-benzpyrene, and mixtures thereof.

Claim 20. (New) The method for preserving tuna according to claim 11, wherein said smoke is pressurized to 2 to 10 kg/cm^2 prior to said ejecting.

SUPPORT FOR AMENDMENTS

Claims 12-20 have been added.

New Claims 12-20 are supported by previously presented Claims 1-10. Further support for new Claims 12-20 is provided by page 18, lines 4-20, Table 1 appearing on pages 20-21, page 22, lines 22-24, and page 27, lines 9-15.

No new matter has been introduced by the present amendment.